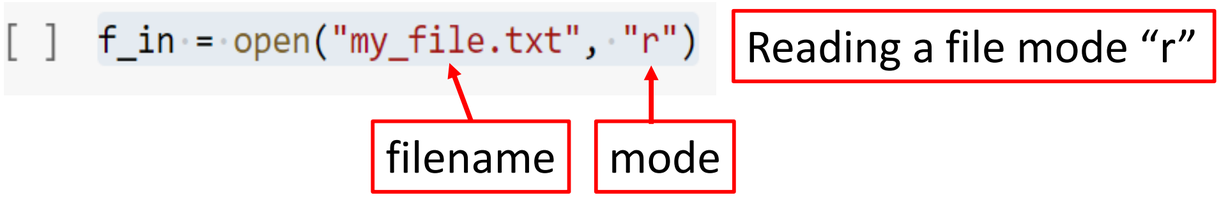
File Handling
- Reading a file -

- Python has several functions for creating, reading and changing a file.
- The main function for working with files in Python is the **open()** function and it takes two parameters: *filename* and *mode*.



- The **open()** function has a **read()** method for reading the content of the file:

```
[ ]  f_in = open("my_file.txt", "r")
     data = f_in.read()
     print (data)
```

File Handling
- Writing a file -

- The **open()** function has a **write()** method for writing the content to the file:

```
[ ]  f_in = open("my_file.txt", "w")
```

filename

mode

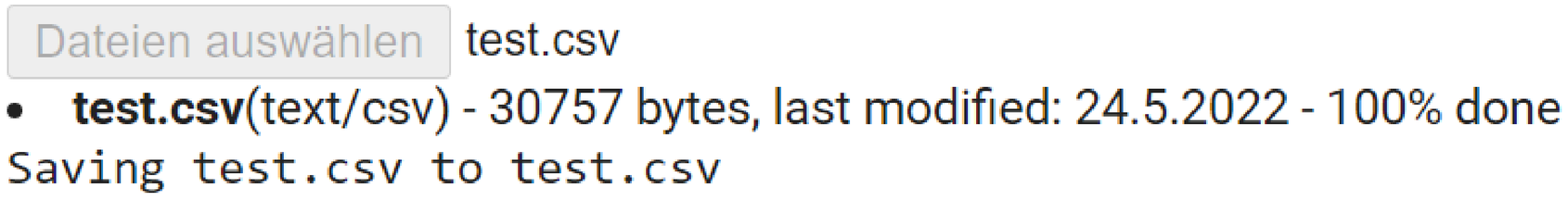
Writing a file mode “w”

```
[ ]  f_in = open("my_file.txt", "w")
     data = "My new data."

     # We overwrite the content of the file.
     f.write(data)
     # Close the file.
     f.close()
```

File Handling – Try it out

- Check your Email and store the file test.csv on your PC.
- Go to your Colab Notebook and enter the two lines above and run the cell.
- An upload button will appear and you can upload the test.csv file.

```
from google.colab import files

uploaded = files.upload()
```



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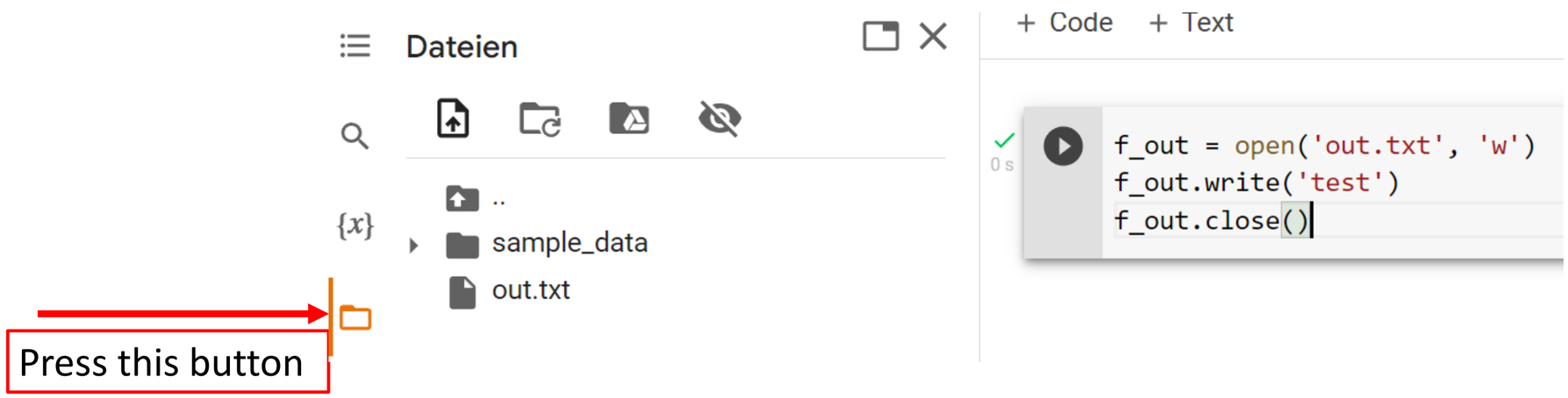
File Handling – Try it out

```
data = open('test.csv', 'r')
print (data.read())
```

```
data = open('test.csv', 'r')
print (data.readlines())
```



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File Handling – Try it out

```
f_in = open('test.csv', 'r')
# Read the content of the file line by line.
data = f_in.readlines()
print (data)

# Loop over each line inside the file and append the word 'hello' to each line
new_data = ''
for line in data:
  # print (line)
  # Remove spaces at the beginning and at the end of the string with the strip method().
  line = line.strip()
  # print (line)
  # We append the line and the word hello to the variable new_data.
  # We also add a new line feed for each line.
  new_data = new_data + line + 'hello' + '\n'
print (new_data)

# Create a new file
f_out = open('out.txt', 'w')
# Write the content of new data into the file
f_out.write(new_data)
# Close the file
f_out.close()
```

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